



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

BC8+2

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/228,872	01/11/1999	MICHAEL W. BARRY	TRSY-23.677	8021

25883 7590 03/12/2002

HOWISON, THOMA & ARNOTT, L.L.P.
P.O. BOX 741715
DALLAS, TX 75374-1715

EXAMINER

WALLERSON, MARK E

ART UNIT	PAPER NUMBER
2622	20

DATE MAILED: 03/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/228,872	Applicant(s) Barry et al
	Examiner Mark Wallerson	Art Unit 2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on Feb 7, 2002
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 5-27 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 5-13, 15-23, and 25-27 is/are rejected.
- 7) Claim(s) 14 and 24 is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s). _____
- 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152)
- 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) Other: _____

Art Unit: 2622

Part III DETAILED ACTION

Notice to Applicant(s)

1. This action is responsive to the following communications: response filed on 2/7/02.
2. This application has been reconsidered. Claims 5-27 are pending.

Continued Prosecution Application

3. The request filed on 2/7/02 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/228,8782 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et. al. (hereinafter referred to as Barry) (U. S. 5,596,416) in view of Matias (U. S. 5,528,374).

Art Unit: 2622

With respect to claims 5, 7, and 18, Barry discloses a multiple print engine (column 1, lines 56-57) for printing one or more copies (files) of a multiple page document (column 1, lines 57-63) input as a single print job (column 1, lines 63-65) comprising a plurality of physical print engines (10) each having an input for rasterized data, and an output bin (23) for receiving printed output pages; a job distributor (30) for receiving multiple page documents (column 3, lines 22-25) and providing the rasterized page data for parallel distribution to the inputs of the plural physical print engines (column 3, lines 35-55) according to print job parameters associated with the rasterized data (column 3, lines 39-42).

Barry differs from claims 5, 7, and 18 in that he does not clearly disclose that the job distributor has a single RIP engine (processor).

Matias discloses a printing apparatus in which a single RIP (16) processes jobs for plural print engines (figure 3), the front end device may queue or input the same or different job to each engine via the multiplexer (column 6, lines 59-62) (which reads on providing the rasterized data to the plural engines according to parameters associated with the rasterized data). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Barry wherein a single RIP would be used. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Barry by the teaching of Matias in order to simplify the printing process.

Further with respect to claim 18, Barry discloses an image task manager for retrieving the rasterized image for the print job and determining a print order for each page according to print

Art Unit: 2622

job parameters (column 6, lines 50-59), and an engine manager (130) for selecting one of the print engines to print. each image (column 6, line 60 to column 7, line 3).

Further with respect to claim 7, Barry discloses a storage device for storing each rasterized image (149); an image task manager for retrieving the rasterized image for the print job and determining a print order for each page according to print job parameters (column 6, lines 50-59), and an engine manager (130) for selecting one of the print engines to print. each image (column 6, line 60 to column 7, line 3).

With regard to claims 6 and 19, Barry discloses that the print engine comprises an electrophotographic print engine having an interface circuit coupled to the input (column 6, lines 12-15).

With respect to claim 8, Barry discloses the job parameters associated with the rasterized images comprises information encoded in the rasterized page data and information entered by the user (column 3, lines 17-25 and 36-39 and column 7, line 67 to column 8, line 14).

With regard to claim 9, Barry discloses the encoded information includes printing control information (column 9, lines 28-36).

With respect to claims 10 and 20, Barry differs from claim 10 in that he does not a RIP engine Matias discloses a decoder (42) for decoding input print strings; a rasterizer (46) for generating a rasterized image mapped to the input print data (column 4, lines 15-38), a formatter (46) for constituting each image as a page of data (column 4, lines 15-38), and a storage (149) for storing each rasterized image. Therefore, it would have been obvious to one of ordinary skill in

Art Unit: 2622

the art at the time of the invention to have modified Barry by the teaching of Matias in order to improve the image processing.

With regard to claims 11 and 21, Barry discloses page buffers for storing rasterized page data (149, figure 5).

With respect to claims 12 and 22, Barry discloses a dissembler (120) for extracting print job parameters from the rasterized page data, and an arranger (126) for arranging the print order for each print job (column 6, line 60 to column 7, line 3).

With respect to claims 13, 23, and 26, Barry discloses routing rasterized images directly to the print engine (column 7, lines 4-19).

With respect to claims 15 and 25, Barry discloses a selector (120) for associating one of the engines with each rasterized data (column 7, lines 4-19).

With regard to claim 16, Barry discloses that the rasterized images have associated print characteristics for the print job such that the manager is operable to control the selected print engine independent of information encoded in the images (column 7, lines 13-19 and column 9, lines 28-36).

With respect to claims 17 and 27, Barry discloses sending data to at least two print engines at the same time (column 10, lines 49-50).

Art Unit: 2622

Allowable Subject Matter

6. Claims 14 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 9/12/00 have been fully considered but they are not persuasive. Applicant submits that neither Barry or Mathias discloses any type of distribution based on print job parameters associated with the rasterized data after Ripping. The Examiner respectfully disagrees.

Barry discloses determining which print engine the job is to be distributed to based on the content of the page (column 3, lines 36-49). Mathias discloses that a job or different jobs may be routed to multiple print engines after being processed by an RIP (column 6, lines 51-62 and column 4, lines 45-48). The combination of Barry and Mathias therefore teaches Applicant's invention of distribution based on print job parameters associated with the rasterized data after Ripping.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Wallerson whose telephone number is (703) 305-8581.

Art Unit: 2622

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:

(703) 872-9314 (for formal communications intended for entry)

(for informal or draft communications, such as proposed amendments to be discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

Crystal Park Two
2121 Crystal Drive
Arlington, VA.
Sixth Floor (Receptionist)


MARK WALLERSON
PATENT EXAMINER

MARK WALLERSON